



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,381	12/12/2003	Robert Vincent Faller	7858MRR	9771

27752 7590 11/30/2006

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL BUSINESS CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

EXAMINER

KRASS, FREDERICK F

ART UNIT PAPER NUMBER

1614

DATE MAILED: 11/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/734,381

Applicant(s)

FALLER ET AL.

Examiner

Frederick Krass

Art Unit

1614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) 7-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **Election of Species Requirement**

Applicant's traversal of the election of species requirement is noted.

The arguments made in the passage bridging pages 4 and 5 of Applicant's remarks would appear to be drawn to a restriction, not an election of species, requirement. As such, they are not relevant to the instant election of species requirement. Applicant is reminded that the purpose of an election of species requirement is to reduce the burden during examination by focusing on an elected embodiment; upon a finding of allowability for the elected species the search is extended and the non-elected species examined at that time. This is in direct contrast to a restriction requirement, in which the non-elected invention is permanently removed from consideration (excepting the special situation of rejoinder practice under In re Ochai).

Accordingly, the requirement for election of species is maintained.

### **Previous Rejections**

Unless specifically maintained infra, all previous rejections are withdrawn.

### **New Matter Rejection**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the

Art Unit: 1614

art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 and 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification as originally filed discloses polyphosphonates which are polyelectrolytes, *i.e.*, “polymeric mineral surface active agents”. This particular subgenus of polyphosphonates, exemplified by the vinyl polymers and copolymers disclosed at the passage bridging page 6, line 26 to page 8, line 6 of the specification, possesses the requisite substantivity and hydrophilicity necessary to impart the desired conditioning effects necessary to carry out Applicant’s invention. See, *e.g.*, page 6, lines 10-25.

The specification as originally filed does not describe the broader genus of “phosphonate group containing copolymer(s) or cotelomer(s)” now recited. This is far broader in scope than the more limited subgenus of polyelectrolyte polyphosphonates originally disclosed.

### **Anticipation Rejection**

Claims 1-6 and 10 were rejected under 35 U.S.C. 102(b) as being anticipated by Gaffar et al (USP 5,032,386).

This rejection is maintained.

Art Unit: 1614

Applicant argues that Gaffar does not disclose phosphonate containing copolymers or cotelomers having the activity of enhancing fluoridation and remineralization of teeth. To the contrary, Applicant continues, the instant polymers have been shown to decrease the amount of fluoride necessary to achieve the same fluoride uptake as the corresponding composition not containing those polymers; moreover, the instant polymers are hydrophilic, while Gaffar's are hydrophobic and contain adhesion enhancing groups. (Remarks, passages bridging pages 6 and 7).

The examiner does not dispute the factual veracity of these observations. A careful reading of the claims demonstrates, however, that these features are not required claim limitations.

Note, for instance, that claim 1 recites a "method for enhancing protection of teeth against caries and cavities and increasing resistance to acid demineralization associated with caries processes" in which a polyphosphonate is delivered together with a fluoride; it does not, however, specify which of the two components provides the results, nor does it specify what the increase is relative to. Accordingly, when the instant claims are interpreted as broadly as is reasonable, they are in fact anticipated by Gaffar, since the addition of a fluoride will increase caries resistance (and thus decrease resistance to acid demineralization caused thereby) relative to the corresponding composition containing no fluoride.

Similarly, it is noted that the instant claims merely recite polyphosphonates generally, and specify neither hydrophilic nor hydrophobic properties.

### **Obviousness-Type Double Patenting Rejection**

Claims 1-6 and 10 were provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of copending Application 10/737,425 in view of Gaffar et al (USP 5,032,386).

This rejection is maintained, pending submission of the Terminal Disclaimer promised by Applicant. (Remarks, page 8, first paragraph).

### **Action is Final, Necessitated by Amendment**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 1614

### **Correspondence**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick Krass whose telephone number is (571) 272-0580. The examiner can normally be reached on Monday-Friday from 9:30AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached at (571) 272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frederick Krass  
Primary Examiner  
Art Unit 1614

